

ORAL ARGUMENT NOT SCHEDULED

NO. 16-1420

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**UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

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AMERICAN RAILCAR INDUSTRIES, INC., Petitioner,

v.

FEDERAL RAILROAD ADMINISTRATION, *et al.*, Respondents.

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On Petition for Review of  
Railworthiness Directive No. 2016-01  
Issued by the Federal Railroad Administration

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**Brief of Petitioner American Railcar Industries, Inc.**

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## **CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES**

**(A) Parties and Amici.** The parties to this case are as follows

The Petitioner is American Railcar Industries, Inc.

The Respondents are the Federal Railroad Administration; Patrick T. Warren, Acting Administrator, U.S. Federal Railroad Administration; and Robert C. Lauby, Associate Administrator for Railroad Safety, U.S. Federal Railroad Administration. Sarah E. Feinberg resigned as the Administrator of the Federal Railroad Administration subsequent to the filing of this suit. A new Administrator has not been appointed. Patrick T. Warren is serving as the Acting Administrator. Pursuant to Federal Rule of Appellate Procedure 43(c)(2), Mr. Warren is listed here as the automatically-substituted party until a new Administrator is installed.

No intervenors or amici have appeared.

**(B) Rulings Under Review.** Petitioner seeks review of Railworthiness Directive No. 2016-01 (the “Directive”) issued by Respondent Federal Railroad Administration (the “FRA”). The Directive was initially issued on September 30, 2016, and notice of its issuance was published in the Federal Register, 81 Fed. Reg. 68,100 (Oct. 3, 2016). JA0001-JA0010. A revised version was issued on November 18, 2016, was not published in the Federal Register, and is available at <http://www.fra.dot.gov/eLib/details/L18383>. JA0011-JA0027.

(C) **Related Cases.** Petitioner first challenged the Directive on November 28, 2016, within 60 days of its original issuance (Case No. 16-1409). At the time, Petitioner also sought agency reconsideration of the Directive. Petitioner later withdrew that reconsideration request and filed a new petition challenging the Directive on December 12, 2016 (Case No. 16-1420). The Court consolidated the two cases on December 14, 2016. On December 14, 2016, Petitioner moved, without objection from Respondents, to withdraw the petition in the first case (Case No. 16-1409), which this Court granted on January 5, 2017. Otherwise, the Directive has not previously been before this Court and counsel is aware of no related cases before this Court or any other court.

## **CORPORATE DISCLOSURE STATEMENT**

American Railcar Industries, Inc. is a publicly traded corporation, incorporated in the state of North Dakota. Icahn Enterprises L.P., a publicly traded entity, owns more than 10% of ARI's stock. No other publicly held company has a 10% or greater ownership interest in the entity.

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## GLOSSARY

<b><u>Abbreviation</u></b>	<b><u>Term</u></b>
AAR	Association of American Railroads
APA	Administrative Procedure Act
CTCX-736177	The tank car that was found to have leaked one gallon of ethanol in May 2014
FRA	Federal Railroad Administration
NDT	Nondestructive Testing
NPRM	Notice of Proposed Rulemaking
PHMSA	Pipeline and Hazardous Materials Safety Administration
POD	Probability of Detection

## JURISDICTIONAL STATEMENT

FRA issued the Directive under the authority granted to the Secretary of the Department of Transportation (“DOT”) by the Hazardous Materials Transportation Act (the “Act”), 49 U.S.C. §§ 5101-5128. *See* 49 C.F.R. Part 180.<sup>1</sup> The specific regulatory basis cited for the Directive is 49 C.F.R. § 180.509(b)(4), which vests authority in the Associate Administrator for Safety.

This Court has jurisdiction over Petitioner’s challenge pursuant to 49 U.S.C. § 5127(a). The Directive is “final” agency action under 5 U.S.C. § 704 because it represents “the consummation of the agency’s decisionmaking process” and is an action “from which legal consequences will flow.” *See Nat’l Mining Ass’n v. McCarthy*, 758 F.3d 243, 250 (D.C. Cir. 2014) (citing *Bennett v. Spear*, 520 U.S. 154, 177-78 (1997)). FRA also represented the Directive as final agency action effective upon issuance. JA0021.

ARI timely filed petitions for review on November 28, 2016, within 60 days of issuance of the original version of the Directive, and December 12, 2016, within 60 days of issuance of the revised Directive.

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<sup>1</sup> Pertinent statutes and regulations are set forth in an addendum.

## **STATEMENT OF ISSUES PRESENTED FOR REVIEW**

1. Whether the Directive is unlawful because it is a legislative rule not promulgated in accordance with the requirements of the Administrative Procedure Act (“APA”), 5 U.S.C. § 553 and the Act.

2. Whether the Directive is arbitrary, capricious, and inconsistent with law because, among other grounds, the determination that there was “an objectively reasonable and articulable belief that a tank car or a class or design of tank cars may be in an unsafe operating condition” is unsupported by the record, failed to address substantial contrary evidence, and failed to provide a rational connection between the conditions found on some tank cars and the remedies imposed on an entire class of tank cars.

3. Whether FRA exceeded its authority under 49 C.F.R. § 180.509 because that regulation does not authorize FRA to require tank car owners to conduct specific “inspections and tests” not required under existing law or regulation.

4. Whether the Directive is arbitrary, capricious, and inconsistent with law because the substantive requirements imposed by the Directive are not supported by the record, contradicted by evidence before the agency, and not the product of reasoned decision-making.



## STATEMENT OF CASE

Petitioner American Railcar Industries, Inc. (“ARI”), a manufacturer and owner of tank railcars, brings this petition to challenge Railworthiness Directive No. 2016-01 (the “Directive”), issued by Respondent Federal Railroad Administration (“FRA”) on September 30, 2016, and revised and superseded on November 18, 2016. The Directive, which did not follow the notice-and-comment procedures required by the APA, is unprecedented; it imposes massive new and immediate obligations on ARI and other owners of 14,800 tank cars across the United States. The Directive violates the APA, the Act, and FRA’s own regulations.

### **A. Regulatory Scheme for Railroad Tank Cars**

Congress passed the Act to “protect against the risks to life, property, and the environment that are inherent in the transportation of hazardous material.” 49 U.S.C. § 5101. The Secretary is charged with implementing the Act and is authorized to “prescribe regulations for the safe transportation, including security, of hazardous material.” *See* 49 U.S.C. § 5103(b). These are known as the Hazardous Materials Regulations (“HMR”) and, with respect to tank railcars, are jointly promulgated by the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) and FRA. *See* 49 C.F.R. parts 171 through 180. The regulations also incorporate by reference standards from the Association of

American Railroad (“AAR”) Manual of Standards and Recommended Practices Section C-III, Specifications for Tank Cars M-1002 (the “Tank Car Manual”). *See* 49 C.F.R. § 171.7.

The regulations include a qualification and maintenance program for tank cars. 49 C.F.R. part 180 Subpart F. The regulations require that each tank car owner provide for a tank car facility to “inspect and test” tank cars at certain intervals, not to exceed ten years, to ensure that the structural elements of the cars satisfy the applicable requirements. 49 C.F.R. § 180.509(c). A tank car is deemed to be “qualified for use” if (among other things) a visual inspection “shows no structural defect that may cause leakage from or failure of the tank” and a structural integrity inspection and test “shows no structural defect that may initiate cracks or propagate cracks and cause failure of the tank before the next inspection and test interval.” 49 C.F.R. §§ 180.511(a)-(b).

As FRA has explained, “[t]he HMR generally are performance-oriented regulations that provide the regulated community a certain amount of flexibility in meeting safety requirements.” 76 Fed. Reg. 51,324 (Aug. 18, 2011). Accordingly, the inspection and test regulations identify the types of tests to be conducted, set the overall schedule, and require that no structural defects as defined above be left unrepaired, but *the details on how a test is to be performed is determined by the tank car owner in consultation with the tank car facility*, pursuant to the owner’s

qualification procedures and acceptance criteria, which are incorporated into a facility's quality assurance program. 49 C.F.R. §§ 179.7 (requirements for quality assurance programs), 180.503 (defining "Qualification" as meeting appropriate standards). The quality assurance program must set forth "[p]rocedures for evaluating the inspection and test technique employed, including the accessibility of the area and the *sensitivity and reliability of the inspection and test technique and minimum detectable crack length.*" 49 C.F.R. §§ 179.7(b)(10) (emphasis added). The program is "approved" by AAR, 49 C.F.R. § 179.7(a), but it is not reviewed or approved by FRA.

Thus, although the regulations impose a wide variety of requirements, the detailed manner and means of achieving them are developed by each tank car owner. This includes determining the test technique to be used and the "sensitivity and reliability" criteria for that test. 49 C.F.R. § 179.7(b)(10). One method owners use is nondestructive testing ("NDT"), which is typically mandated only for *critical* areas of a tank car. *See* 49 C.F.R. § 180.509(e).<sup>2</sup> An owner can demonstrate that its NDT techniques will reliably identify flaws using a probability of detection ("POD") method, which will indicate how likely it will be to locate

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<sup>2</sup> NDT can include tests using ultrasonic sound, liquid dye penetrant, magnetic particle, and visual testing. JA0087-JA0104.

flaws of particular sizes when conducting the test. JA0112-JA0125,JA1169-JA1171,JA1316-JA1317,JA1605-JA1608.

Determining the POD for a given test is a detailed process that involves considerable mathematical and engineering modeling and physical testing. JA0112-JA0125. In basic terms, the tank car owner first must identify the “critical flaw size” (*i.e.*, one that engineering modeling determines could cause a tank car to “fail” before its next testing interval) and use that to determine what size crack to search for in the test. JA0112-JA0125,JA1316-JA1317,JA1605-JA1608. Then, “samples” are developed with flaws created to be of similar size and type to those found in real cars. JA0112-JA0125,JA1316-JA1317,JA1605-JA1608. Inspectors then attempt to locate the flaws on these samples using the proposed test technique. A probability that a certain flaw size will be detected is discerned by measuring the inspector’s “hits” and “misses.” JA0112-JA0125,JA1316-JA1317,JA1605-JA1609. A 90% POD for flaws of X size basically means that there a 90% probability that the inspection technique will find a flaw of X size.

For years, the industry and FRA have had ongoing discussions regarding how a POD is to be determined and used. JA1140-JA1153,JA1154,JA1155,JA1262,JA1263,JA1269,JA1270,JA1356-JA1364,JA1370. It is undisputed that under current regulations a tank car owner,

not FRA, determines the reliability and sensitivity criteria for a test (including POD).

The obligation to inspect and test is set forth in 49 C.F.R. § 180.509, including the specific frequency (subsection (c)) and types of tests (subsections (c)-(l)). Special circumstances requiring more frequent inspections and tests are set forth in subsection (b). Specifically, 49 C.F.R. § 180.509(b)(4) at issue here provides in pertinent part:

Without regard to the qualification compliance date requirements of any paragraph of this section, an owner of a tank car... must ensure an appropriate inspection and test according to the type of defect and the type of maintenance or repair performed if... (4) The Associate Administrator for Railroad Safety, FRA, requires it based on the existence of an objectively reasonable and articulable belief that a tank car or a class or design of tank cars may be in an unsafe operating condition.

49 C.F.R. § 180.509(b)(4). Thus, FRA can require testing more frequently than otherwise might be required, but in all circumstances the *tank car owner and tank car facility* must determine what test is appropriate, as set forth in the quality assurance program.

The Act provides FRA with several authorities to ensure safe rail transport of hazardous materials. These include issuing regulations, removing packages from transport, ordering packages to be opened or examined, and issuing emergency orders without prior notice or opportunity for hearing. *See* 49 U.S.C. §§ 5103(b), 5121(c), 5121(d). FRA regulations create additional inspection and

test requirements under certain circumstances, one of which is at issue here. 49 C.F.R. § 180.509(b).

## **B. Single Tank Car Leak in May 2014**

ARI manufactured a 30,000-gallon tank car, CTCX-736177, using the “ARI 300 stub sill” design. JA0002,JA0021,JA1713. This design includes a two piece sump and bottom outlet valve (“BOV”) that essentially is a fixture welded to the bottom of the tank car that permits its contents to be unloaded from either the top or bottom of the car. CTCX-736177 was built by ARI and is owned by CIT Group/Equipment Financing Inc. (“CIT”). JA0002.

On May 9, 2014, CTCX-736177 was reported as slowly leaking about one gallon of ethanol through the weld at the sump in a railyard in Franklin Park, Illinois. JA0002,JA0250-JA0251,JA1713. The tank car was sent for inspection. Analysis using ultrasonic testing at the bottom outlet valve and sump weld determined that the leak was likely caused by a lack of fusion at the weld (*i.e.*, that the weld was never fully joined to the metal to which it was applied). JA0529-JA0530,JA0544,JA0566,JA1713,JA1715,JA1733,JA1815,JA1819-JA1820.

Ultrasonic testing detected the presence of some other sub-surface weld flaws (though not necessarily of a critical or unsafe character), but did not locate any cracks. JA0542-JA0555,JA1713-JA1718,JA1733-JA1734. The car later had an area of the tank removed and microscopically examined. JA0545,JA1713,JA1733-

JA1734. That examination confirmed the presence of these weld flaws, such as slag (*i.e.*, small particles from the welding process that get trapped in a weld), which ranged in depth from 0.01 to 0.29 inches, but again did not locate any cracks. JA0545,JA1713,JA1733-JA1734.

### **C. Subsequent Inspection and Testing of Over 700 Tank Cars Over the Next Two Years**

Beginning shortly after the small leak was discovered, CIT inspected 386 of its cars built to the ARI-300 design. JA1700-JA1701,JA1717-JA1718. None had cracks or leaks. JA1700-JA1701,JA1717-JA1718,JA1734. Although 58 cars had one or more weld “flaws,” none were critical. ARI’s analyses (explained below) later demonstrated that these types of conditions would not lead to leaks. JA1717-JA1718,JA1826. No other cars were reported as having leaks, including during inspections that are required under the regulations each time before a tank car is shipped. 49 C.F.R. § 173.31(d)(1).

ARI also worked closely with FRA for over two years to identify any safety concerns that might exist and address them effectively. JA0276-JA0277,JA0278-JA0280,JA0775-JA0777,JA0834,JA1126-JA1131,JA1474-JA1476,JA1489,JA1510-JA1511,JA1512-JA1513,JA1546-JA1548,JA1733-JA1735. ARI agreed to (1) conduct stress and fatigue analysis of the weld flaws found on CTCX-736177, and (2) inspect a sample of tank cars with the same configuration as CTCX-736177. JA0829,JA1709-JA1718. The purpose of this

was to supplement the CIT inspections and determine the frequency of non-conforming welds and the risk of cracks or leaks that they presented. JA0860-JA0861,JA1709-JA1718. ARI regularly provided updates to FRA. JA0829,JA0834-JA0853,JA0855-JA0857,JA1474-JA1476,JA1546-JA1547,JA1702-JA1703,JA1709-JA1718.

First, ARI conducted analyses to determine the likelihood that a weld flaw of the type found on the one car that leaked might over time become a crack and that the crack may become a leak. JA1713-JA1718,JA1819,JA1822. The analysis utilized conservative assumptions about flaw size, tank thickness, and presence of cracks. JA1713-JA1715, JA1822. The analysis modeled the most serious flaw found on CTCX-736177 in the location subject to the highest stress. It revealed that (1) the weld flaws found were all in a low-stress area even under the most severe conditions, and (2) even if a severe flaw existed in these welds, it would not grow and the tank car would be able to reach its next scheduled inspection and test without risk of a leak. JA1717-JA1718, JA1824-JA1826.

Second, ARI tested an additional representative sample of 321 cars that matched the CTCX-736177 design (the universe subject to the Directive). JA1709,JA1715-JA1716. The cars were tested for both critical conditions, such as tank leaks and weld cracks, and minor conditions, like weld flaws. JA1715-JA1716. These sampling and analytic procedures were approved by FRA and



included ARI offering more stringent procedures than required by any regulation or industry standard (*e.g.*, using ultrasonic testing despite it not being a critical weld). JA0599-JA0607,JA0775-JA0777,JA0834-JA0853. No cars had cracks or leaks, meaning that there was a 99.99% certainty that no cars in the population of 14,800 cars were likely to have either a leak or crack, even if they had weld “flaws.” JA1715,JA1717. The study also showed that 55 of the inspected cars contained a weld flaw at one of the two weld joints tested, but that these flaws (the vast majority of which were less than 1/8-inch in depth) would not lead to cracks or leaks. JA1715-JA1716.

Together with the CIT sampling, over 700 of the 14,800 tank cars at issue here were inspected. Not a single crack or leak was found. JA1717-JA1718. The damage tolerance analysis confirmed that even the minor weld conditions that were found (*e.g.*, slag, lack of fusion) would not lead to cracks or leaks. JA1717-JA1718,JA1826. Preliminary results of these analyses were presented to FRA at various times, including weekly reports and a meeting on May 17, 2016. JA1546-JA1548,JA1549,JA1709-JA1710. By the summer of 2016 ARI had presented FRA with data on over 300 cars tested, and presented data as to the full 321 cars tested by the end of September 2016. JA1549,JA1702-JA1703.

#### **D. FRA Issues the Original Directive**

On September 30, 2016, FRA issued the original version of the Directive. JA0001-JA0010. FRA did not first issue a proposed Directive, give ARI or other affected tank car owners notice that it would be coming, hold hearings, provide opportunity to comment, or maintain an administrative docket.

The Directive stated, without reference to any evidence, study, or test, that (a) “slag pockets” of the type found in CTCX-736177 prevented the complete fusion of the joint between the tank plate and the castings, (b) such slag produced the porosity and lack of fusion observed in CTCX-736177, and (c) over time these flaws initiated and propagated cracks in the welds resulting in the tank leaking. JA0003. The original Directive also concluded (again without citing to any evidence) that welds with the amounts of slag and incomplete fusion found in the CIT sample of similar cars in the ARI-300 design are not likely to withstand the stresses they will encounter and, over time, these conditions will initiate and propagate cracks as occurred in CTCX-736177. JA0004. The Directive did not address any of the analyses presented by ARI or others contradicting these statements.

The original Directive was made effective immediately upon issuance. It required, among other things, that all tank car owners inspect and test the sump and bottom outlet valve welds for all 14,800 cars with the ARI-300 design within 12

months for those in hazardous materials service. JA0005-JA0009.<sup>3</sup> It required that specific types of tests be performed and be capable of locating and evaluating “cracks, incomplete penetration, incomplete fusion, and slag inclusions” to a 90% POD level (*i.e.*, to ensure a 90% probability that a technician would locate a flaw). JA0006-JA0007. None of these requirements are found in the current regulations.

#### **E. Events After the Original Directive Was Issued**

On October 7, 2016, ARI sent the final report (initially shared in draft in May 2016) analyzing the risk created by weld flaws, and immediately requested a meeting with FRA. JA1709-JA1718. The original Directive created significant controversy in the industry, particularly because FRA had only issued three known directives in the past and none came close to imposing new industry-wide requirements like this one. JA1811. ARI wrote to FRA on several occasions, including a letter dated October 14, 2016, reiterating the request for a meeting and further explaining many of the practical and legal problems with the Directive. JA1729-JA1738, JA1768-JA1799, JA1815-JA1816.

ARI noted as a threshold matter that there was simply not enough capacity in shops to conduct all the inspections required by the Directive. JA1730-JA1731.

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<sup>3</sup> To the extent that the original Directive had other troubling provisions that were later included in the revised Directive, they will be discussed in Section F below.

Facilities were already at capacity even without considering the Directive's mandate. JA1730-JA1731.

ARI also explained that requiring a specific 90% POD was not an industry standard; had never been imposed on the rail industry by Directive, regulation, or otherwise; and would be impossible to meet under the conditions imposed. JA1731-JA1732,JA1736-JA1737. ARI explained that (1) FRA's own studies showed that a 90% POD could not be reached; (2) the Directive imposed the impossible because (among other things) it failed to identify the flaw size that needed to be identified to a 90% probability; (3) it would take up to six months for facilities to become qualified to conduct the inspections and testing, making the Directive's timelines even more infeasible; and (4) the Directive required digital records of ultrasonic tests, but the industry's equipment does not have that capability. JA1731-JA1732,JA1736-JA1737,JA1814.

ARI explained that FRA's conclusion extending its concern from one car to 14,800 of the same class or similar ARI-300 design was unsupported by the evidence, including the ARI and CIT 700-car samples demonstrating no evidence of cracks or leaks, and the stress analysis indicating that slag or weld flaws would not lead to cracks. JA1717-JA1718,JA1733-JA1735. Finally, ARI noted that the inclusion of cars manufactured by ACF Industries LLC ("ACF"), which uses the same design but is a different manufacturer with its own welders and

manufacturing plant, was unsupported because there was no evidence of problem conditions in such cars and FRA believed the problem related to the manufacture and welding of the cars. JA1727-JA1728,JA1733.

On October 24, 2016, FRA finally agreed to meet with ARI representatives. JA1800-JA1805. ARI presented the following uncontroverted data and conclusions from the sample tests:

- Only one car out of 14,800 has leaked.
- Analysis of 700 cars of the same class revealed:
  - no cracks or leaks,
  - a 1-in-10,000 chance that such cars would have or develop a crack or leak, and
  - a 1-in-100 chance of finding a lack of fusion and a 15% chance of finding weld slag, though as noted above such items were shown to not lead to a leak.
- Tests showed that the subject weld was not a critical stress area.
- 90% POD was unattainable, no shop is currently qualified to meet that standard, and it had never been required in any regulation.<sup>4</sup>

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<sup>4</sup> The Directive cites to the 2014 version of Appendix W, JA0003, which is not incorporated by reference into the regulations and is thus not a binding regulation and cannot be imposed. *See* 49 C.F.R. § 171.7; *see also* 77 Fed. Reg. 37,962, 37,964 (June 25, 2012) (rejecting proposal to incorporate later version of

JA1800-JA1805.

After the meeting, ARI sent FRA a letter again reiterating its concerns and presenting additional data to substantiate them. JA1808-JA1810.

#### **F. FRA Issues the Revised Directive**

Despite the concerns raised by ARI, and again without issuing any proposal or giving opportunity for comment, FRA issued a Directive on November 18, 2016, that “revise[d] and supersede[d]” the original version. JA0011. The revised Directive again cited for its legal authority 49 C.F.R. § 180.509(b)(4). JA0011,JA0020. It stated:

FRA inspection and testing of the failed tank car (CTCX 736177) built to the ARI 300 stub sill design identified large slag pockets just below the interior weld surface and extending almost completely through the weld thickness. Inspection of almost 400 additional cars built to this same design found 15% of the cars had the same defects as those identified in CTCX 736177, ranging from 1/2 inch to 22 inches long and from 1/8 inch to 0.39 inches deep. These defects make the cars noncompliant with Federal regulations and, because of this noncompliance, along with facts of the May 9, 2014, failure of tank car CTCX 736177, FRA reasonably believes or suspects and articulated why the cars may be in an unsafe operating condition.

JA0021.

As explained below, the revised Directive did not address the undisputed objective evidence that the condition found on the leaking car did not exist on the

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Tank Car Manual into regulations). Neither the 2000 version nor the 2014 version mandates a quantitative POD requirement.

other 700 that were sampled,<sup>5</sup> nor did it address ARI's analysis that there was barely a 0.01% chance that these conditions might allow for the developing of a crack through which a hazardous material might leak.

### **1. New Substantive Requirements**

The revised Directive continued to “implement specific inspection and testing procedures” not currently called for in the regulations. JA0012. Specifically, the required testing must:

- Include both volumetric inspection (*i.e.*, ultrasonic testing) and surface inspection methods (*e.g.*, liquid penetrant, magnetic particle, or visual inspection), JA0022;
- Be performed by “qualified personnel,” defined in the Directive to be persons trained and tested on the procedures to be used and samples representing the welds to be inspected, JA0012,JA0022-JA0023;
- Ensure the test would be able to “locate, interpret, evaluate, and size cracks, incomplete penetration, incomplete fusion, and slag inclusions” to a level of sensitivity and reliability of 90% POD for indications 3/16 inch long by 1/64 inch wide (for surface inspection methods) and 3/16 inch long by 1/8 inch deep (for volumetric inspection methods),

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<sup>5</sup> CIT and ARI combined to sample over 700 cars prior to the issuance of the original Directive, and an additional approximately 200 cars were inspected by the time the revised Directive was issued.

JA0012,JA0023. By reference, 3/16 inch is the size of a pea and 1/64 inch is smaller than a grain of sand.

The revised Directive reduced the number of cars that needed to be pulled from service, inspected, and tested within the first 12 months to a 15% sample of cars in hazardous service (over 2,000 cars), but FRA reserved in its sole discretion the power to require unspecified further testing of the remaining 85% of the tank cars. JA0015-JA0016,JA0024-JA0025,JA0027. The 15% sample was ordered to consist of tank cars with the highest mileage, based on FRA's belief that those "are more likely to have developed cracks or leaks." JA0016. Under that criteria, the sole car that leaked would not have been part of the sample.

The recordkeeping and reporting requirements were modified but still require more than current regulations, including that digital records or images of ultrasonic inspections be made if an indication is found, JA0019,JA0024, and reports of each inspection, test, and repair must be made to FRA within 30 days of the Directive's issuance and every 90 days thereafter. JA0025-JA0026.

## **2. The 90% POD Requirement**

As explained above, *supra* at p.5-6, POD refers to the probability that a particular test method could detect a given flaw size. In the revised Directive, with no explanation or support, FRA stated its conclusory belief that the 90% POD is "both feasible and necessary given the defects involved," noting its belief that 90%



POD “is achievable for properly qualified inspectors and expert interpretation given the length of time the industry has had to refine their NDT procedures,” citing a statement made in a notice of proposed rulemaking (“NPRM”) preamble from 1993, 58 Fed. Reg. 48,485, 48,487 (Sept. 16, 1993). JA0018.<sup>6</sup> FRA also claimed that ARI had achieved volumetric NDT procedures with 90% POD for the type and size of flaws identified in the Revised Directive (though, as explained below, this was markedly different). JA0018. It did not address ARI’s concerns with this new requirement.

### **SUMMARY OF ARGUMENT**

This case challenges a “Railworthiness Directive” issued by FRA on November 28, 2016 pursuant to a regulation implementing the Hazardous Materials Transportation Act (the “Act”). The regulation authorizes FRA to require that railroad tank car owners conduct inspections and tests of individual or similar groups of tank cars more often than regularly scheduled if there exists “an objectively reasonable and articulable belief that a tank car or a class or design of tank cars may be in an unsafe operating condition.” 49 C.F.R. §180.509(b)(4).

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<sup>6</sup> That preamble stated that tank car facilities using certain NDT can expect about 90% reliability in detecting flaws, but made clear that “[e]ven with a perfect system, some defects would remain hidden” and “[o]verall, FRA expects NDT to be 80-85% effective in finding significant defects.” 58 Fed. Reg. at 48,487. This NPRM did not cite any justification for the 80-85% figure and did not propose or result in any rule or regulation as to POD. *Id.*

The challenged Directive was issued over two years after a single railroad tank car slowly leaked about one gallon of ethanol. FRA cites to its finding that there were weld “flaws” (lack of fusion) in this car that caused the leak. However, over 900 cars of the same design were tested over the next two years to see if similar flaws existed and whether any presented a risk of leak. The evidence unequivocally demonstrated that though weld flaws did exist in 15% of these cars, they *did not present a risk of leaking*, and inspections for these flaws could wait until each car’s next regularly scheduled inspection with a 99.99% certainty that the cars would not leak. FRA was provided with this information, but never addressed it.

Instead, FRA issued the Directive requiring ARI and all other owners of tank cars to immediately bring almost 14,800 railcars of the same design in for special inspections and to perform unprecedented new tests in order to find and fix weld flaws that are orders of magnitude *smaller* than the condition that led to the one-gallon leak in one car. None of these new testing obligations exist under current regulations.

The Directive violates both the APA and the Act. First, it contains invalidly promulgated legislative rules that substantially change existing regulation and mandate new testing requirements. Among other things, existing regulations expressly require *tank car owners* to determine what numeric testing requirements

will identify any potentially risky tank car flaws or cracks. In contrast, the Directive imposes its own unilateral requirements across the industry that substantially change existing regulations. FRA may not do so without following the notice-and-comment requirement of the APA and the Act.

Second, FRA's action in issuing the Directive pursuant to 49 C.F.R. § 180.509(b)(4) was arbitrary and capricious. The cited regulation only authorizes FRA to issue non-routine inspection orders when there is an "objectively reasonable and articulable belief" based on "particularized facts" that the tank cars in question may be in an unsafe operating condition. The data presented to the agency indisputably and without exception shows that the weld conditions on a small number of the 14,800 cars at issue *would not result in a leak*. Thus there is no objectively reasonable basis for FRA to have concluded that the entire class of 14,800 cars may be in unsafe operating condition and must be brought in, specially inspected, and subject to new testing requirements.

Third, the Directive exceeds FRA's authority under 49 C.F.R. §180.509(b)(4). FRA has imposed new requirements contrary to the plain language of the regulation, which expressly directs the tank car owner to determine what testing methods are appropriate.

Fourth, the actual testing criteria imposed by FRA (including the "90% POD requirement") are arbitrary and capricious. The record indisputably shows that the

POD requirement imposed by FRA has never been applied to nor can it be met by the industry.

For each of these reasons, the Directive must be vacated.

## **STANDING**

This Court has jurisdiction to review a final action by the Secretary issued under the Act. 49 U.S.C. § 5127(a). The statute requires that an objection to the final action be made in the course of the proceeding or there was reasonable ground not to raise it. 49 U.S.C. § 5127(d).

### **A. ARI Has Constitutional and Prudential Standing**

To establish constitutional standing, a petitioner must demonstrate: (1) a concrete “injury-in-fact” that the petitioner has personally suffered, (2) the injury is “fairly traceable” to the defendant’s action, and (3) a favorable decision is likely to redress that injury. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 590 (1992). ARI has standing because it owns 3,425 cars subject to the Directive and, as such, is required to immediately comply with the Directive’s many requirements. It also manufactured many cars owned by others and is compelled to address those cars as well. The Directive was issued by Respondents (signed by Respondent Lauby, pursuant to authority delegated to the FRA Administrator by the Secretary, and by FRA itself). A favorable decision would redress two injuries. First, vacating the Directive would eliminate the need to comply. *See Mendoza v. Perez*, 754 F.3d

1002, 1010 (D.C. Cir. 2014). Second, because ARI is subject to ongoing regulation by FRA, a decision addressing FRA's authority to issue this type of Directive even after full compliance is achieved would redress injuries that may be capable of repetition but evading review. *See Safari Club Int'l v. Jewell*, 842 F.3d 1280, 1288 (D.C. Cir. 2016).

ARI also has prudential standing because its grievances "arguably fall within the zone of interests protected or regulated by the statutory provision," *Bennett v. Spear*, 520 U.S. 154, 162 (1997); *Nuclear Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1266 (D.C. Cir. 2004), as it owns tank cars and is an entity subject to regulation by the relevant laws.

**B. ARI Raised Objections to FRA to the Extent It Was Able to Participate in the Process**

The obligation to participate and submit comments to an agency in order to challenge the action is relaxed where a regulatory action was promulgated without public notice and comment because, "[t]o bar a petition for direct review because the petitioner was not a party to proceedings in which, by definition, it could not join would be to exalt literalism over common sense." *Natural Res. Def. Council v. Nuclear Reg. Comm'n*, 666 F.2d 595, 601 n.42 (D.C. Cir. 1981).

Although ARI worked with FRA to investigate and evaluate the cause of the one-gallon leak in 2014, it could not participate in the development of the original Directive because FRA did not disclose its plans to issue it. After the original

Directive was issued, ARI submitted several letters to FRA, requesting meetings and presenting objections to FRA's conclusions and its legal authority at the one meeting that FRA permitted. JA1709-JA1718,JA1729-JA1738,JA1800-JA1805,JA1808-JA1810. But, again, ARI could not specifically comment on the revised Directive because, despite repeated requests, a draft was never shared. ARI did raise concerns in a letter to FRA after the revised Directive was issued. *See* Letter from J. Hollister to R. Lauby (Nov. 28, 2016) (attached as Exhibit B to Petition for Review).

## **ARGUMENT**

### **I. The Railworthiness Directive Constitutes Invalid Rulemaking Because It Did Not Follow the Notice-and-Comment Procedures Required by the APA and the Hazardous Materials Transportation Act**

By imposing substantive, mandatory, and far-reaching requirements on an entire industry, many of the Directive's requirements — including the 90% POD standard, the training requirement, and the extensive recordkeeping requirements — are, by their nature, legislative rules. As such, FRA is required to follow the notice-and-comment provisions of Section 553, which FRA indisputably did not do. Accordingly, the Directive must be invalidated as an improperly issued legislative rule.

Whether FRA's actions constitute illegal rulemaking under the APA and the Act is a pure question of law for which the court has *de novo* review. *See*

*Nebraska, Dep't of Health & Human Servs. v. U.S. Dep't of Health & Human Servs.*, 340 F. Supp. 2d 1, 18 (D.D.C. 2004). The Court need not look to the record for the purposes of this argument.

**A. The Directive is a Legislative Rule Under the APA**

The Directive is a “rule” under the APA because (1) it is a statement of general or particular applicability that applies across the entire rail industry to all owners of the affected 14,800 tank cars, as well as tank car lessees, tank car facilities, repair technicians, and the rail industry who use these cars; (2) it imposes future obligations on those entities; and (3) it imposes legally binding requirements. *See* 5 U.S.C. § 551(4). An agency action that imposes new and prospective industry-wide requirements is a rule, regardless of how the agency may label the action. *See Nat'l Ass'n of Home Builders v. U.S. Army Corps of Engineers*, 417 F.3d 1272, 1285 (D.C. Cir. 2005).

The Directive is also a legislative rule because it “supplements a statute, adopts a new position inconsistent with existing regulations, or otherwise effects a substantive change in existing law or policy.” *Mendoza v. Perez*, 754 F.3d 1002, 1021 (D.C. Cir. 2014) (citation omitted). Legislative rules have the force of law and “impose legally binding obligations or prohibitions on regulated parties.” *Nat'l Mining Ass'n v. McCarthy*, 758 F.3d 243, 251 (D.C. Cir. 2014). *See also Syncor Int'l Corp. v. Shalala*, 127 F.3d 90, 95 (D.C. Cir. 1997) (the “crucial

distinction” is that a legislative rule “*modifies or adds* to a legal norm based on the agency’s *own authority*”). The Directive meets this standard.

### **1. The Directive Has Legal Effect and Imposes Prospective Binding Obligations on Regulated Entities**

When determining whether an agency action is a legislative rule, “[t]he most important factor concerns the actual legal effect (or lack thereof) of the agency action in question on regulated entities.” *Nat’l Mining Ass’n*, 758 F.3d at 252. *See also Mendoza*, 754 F.3d at 1021 (“The court’s inquiry in distinguishing legislative rules from interpretative rules ‘is whether the new rule effects a substantive regulatory change to the statutory or regulatory regime.’” (quoting *Elec. Privacy Info. Ctr. v. Dep’t of Homeland Sec.*, 653 F.3d 1, 6–7 (D.C. Cir. 2011))).

The Directive creates mandatory, binding requirements on owners of the covered tank cars. It invokes the 49 C.F.R. § 180.509(b) authority permitting FRA to “require” tests, references possible enforcement action, and refers to “requirements” that impacted owners “must” fulfill.<sup>7</sup> Those requirements are set forth below.

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<sup>7</sup> The binding nature of the Directive is further evidenced by the fact that it grants FRA the authority to exempt certain cars from its requirements. *Cf. Cmty. Nutrition Inst. v. Young*, 818 F.2d 943, 947 (D.C. Cir. 1987) (stating that if the agency action were not binding, “it would scarcely be necessary to require that exceptions be obtained”).



## 2. The Directive Substantively Amends and Repudiates Existing Regulations Through Its Imposition of New Obligations

A rule is also considered legislative when it “effectively amends a prior legislative rule,” *Am. Mining Cong. v. Mine Safety & Health Admin.*, 995 F.2d 1106, 1112 (D.C. Cir. 1993), “repudiates or is irreconcilable with [a prior legislative rule],” *id.* at 1109, or “significantly broaden[s]” a rule. *Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1028 (D.C. Cir. 2000).

The requirements imposed by the Directive are new and not grounded in interpretations of previously issued regulations. Further, they in some cases directly contradict and/or broaden the current regulations.

Regulatory Requirement	Mandates from Directive
<b>Testing</b>  Qualification of a tank car requires “careful and critical examination” using “inspections and tests based on a written program approved by the tank car owner.” 49 C.F.R. § 180.503.  The program must include “procedures for evaluating the... test technique employed,” including the “sensitivity and reliability of the inspection and test technique and minimum detectable crack length.” 49 C.F.R. § 179.7(b)(10).	The test method must meet the following criteria: “All surface... methods must be able to detect indications 0.188 (3/16) inches long by 0.016 (1/64) inches wide (maximum values) to a 90% POD. Volumetric NDT methods... must be able to detect indications of major dimension 0.188 (3/16) inches by 0.125 (1/8) inches deep (maximum values) to a 90% POD.”  JA0023.
<b>Training</b>  “Level III” operators determine whether a “Level II” technician requires	Personnel performing tests “must be trained and tested on the procedures to

<p>additional training (<i>e.g.</i>, testing on a sample to be inspected).</p> <p><i>See</i> JA0036-JA0037.</p>	<p>be used and samples representing the welds to be inspected consistent with 49 CFR part 172, subpart H, and Appendix T of the Tank Car Manual.”</p> <p>JA0023.</p>
<p><b>Recordkeeping and Reporting</b></p> <p>Owner must retain inspection and test report until next inspection and test of the same type.</p> <p>“[U]pon request by FRA for a copy of the report, it must be made available”</p> <p>The inspection and test report must include results of each inspection and test performed.</p> <p>49 C.F.R. § 180.517(b).</p>	<p>Owner must retain all records for 10 years following the inspections and tests.</p> <p>Reports sent to FRA every 90 days.</p> <p>“The results of [ultrasonic] inspections must be recorded and digital recordings or images... must be maintained....”</p> <p>JA0024-JA0026.</p>

Agency pronouncements establishing new numerical standards that are not themselves derived from statute or record must be preceded by notice-and-comment rulemaking. For example, in *Catholic Health Initiatives v. Sebelius*, 617 F.3d 490 (D.C. Cir. 2010), this Court considered a Medicare manual that limited reimbursement to hospitals for costs paid to certain offshore insurance companies that invest more than 10 percent of their assets in any specific security. *Id.* at 491-92. The agency, in claiming that the APA’s notice-and-comment procedures did not apply, argued that the manual was only an interpretation of a regulation limiting reimbursement to “reasonable costs.” The Court disagreed and noted that

“when an agency wants to state a principle ‘in numerical terms,’ terms that cannot be derived from a particular record, the agency is legislating and should act through rulemaking.” *Id.* at 495 (citation omitted). The Court concluded that there was “no way” in which agency action that “produce[s] the sort of detailed—and rigid” type of numerical test as did the manual could be considered a mere interpretation of a regulation for reimbursement of a general and objective term as “reasonable costs.” *Id.* at 496.

Similarly, the Seventh Circuit concluded that an agency memorandum that set a specific eight-foot height for fences containing dangerous animals was a legislative rule and did not merely “interpret” a regulation that required facilities housing certain types of animals be constructed of “such material and of such strength as appropriate for the animals involved.” *Hector v. U.S. Dep’t of Agriculture*, 82 F.3d 165, 167-68 (7th Cir. 1996). The Court explained that making rules that are “consistent with the statute or regulation under which the rules are promulgated but not derived from it, because they represent an arbitrary choice among methods of implementation,” such as “[a] rule that turns on a number,” is legislative in nature. *Id.* at 170. *See also United Steel, Paper & Forestry, Rubber, Mfg., Energy, Allied Indus. & Serv. Workers Int’l Union v. Fed. Highway Admin.*, 151 F. Supp. 3d 76, 87-89 (D.D.C. 2015) (finding that an agency rule that set a “rigid percentage threshold” was a legislative rule).

The Directive similarly sets several arbitrary numerical thresholds regarding how NDT is to be conducted and what size flaws it considers to be significant. The current regulations set the type of test and require that the results “show[] no structural defect that may initiate cracks or propagate cracks and cause failure of the tank,” 49 C.F.R. § 180.511, but the owner determines the numeric details as to conducting the test and meeting the acceptance criteria. By contrast, the Directive imposes a strict requirement that the owner use a test that will detect 90% of flaws of a specific size (that FRA dictated). Neither of these specific requirements are set forth in the regulations (nor, as described further below, in the record). As such, they constitute legislative rulemaking under the APA.

### **3. Absent the Directive, None of the Requirements Imposed Would Be Enforceable**

When Congress has delegated legislative authority to an agency and the agency then imposes obligations that, absent the delegation it would be unable to impose, the agency action is a legislative rule. *See Am. Mining Cong.*, 995 F.2d at 1109; *Mendoza*, 754 F.3d at 1022 (a rule is legislative where Congress has not set a substantive standard, but has rather left it to the agency to develop pursuant to delegated general legislative authority); *Syncor*, 127 F.3d at 95 (“[A] substantive rule *modifies* or *adds* to a legal norm based on the agency’s *own authority*.”).

The Act does not itself impose any specific requirements or prohibitions as to testing. Further, current regulations do not require that NDT meet the 90%

POD, do not specify crack size and do not impose the record -keeping requirements in the Directive. *See* 49 C.F.R. part 180. Thus, if the Directive did not exist, neither the statutory text nor the regulations could on their face serve as the basis for an enforcement action for failure to comply with any particulars of the Directive (*i.e.*, meeting the 90% POD, retaining the identified records for ten years, or taking digital photos of ultrasonic results). The clearest example is the 90% POD requirement. As noted in the table above, current regulations require the quality assurance program set the “sensitivity and reliability” of the test technique. *See* 49 C.F.R. §179.7(b)(10). FRA acknowledges that the tank owner, not FRA, sets the POD.<sup>8</sup> Under the Directive, however, FRA is requiring that a 90% POD be met. Failure to test to this specific, numerical standard thus could not constitute any basis for agency enforcement without the Directive in place.

**B. The Directive’s New Requirements May Only Be Issued After Notice and Comment under the APA**

Because the Directive constitutes a legislative rule, it must be promulgated in accordance with the notice-and-comment procedures of the APA. These obligate FRA to publish a general notice of proposed rulemaking in the Federal

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<sup>8</sup> *See* Tank Car Committee Docket and Agenda, October 2016 at 52 (“FRA emphasized that each company is still required to develop their own program and POD values.”), <https://www.aar.org/Documents/BOE/October 2016 TCC Agenda and Docket Final.pdf>

Register, give interested persons an opportunity to submit comments, and publish the final rule—after reviewing and responding to the comments—at least 30 days before its effective date. 5 U.S.C. § 553. FRA indisputably did not follow these steps. To the contrary, the Directive was issued without notice from FRA, without input from ARI or other impacted persons, and effective immediately, completely changing essential aspects of how tank car test programs are supposed to operate and forcing the industry to scramble to attempt to comply with the requirements and deadlines imposed. Accordingly, the Directive is procedurally invalid and must be vacated.<sup>9</sup>

**C. The Hazardous Materials Transportation Act Also Requires that FRA Issue Regulations and Standards Pursuant to Notice-and-Comment Rulemaking**

Agency action is unlawful and must be set aside under the APA when it is “in excess of statutory jurisdiction, authority, or limitations.” 5 U.S.C. § 706(2)(C). When the Department wishes to set standards governing hazardous materials, the Act requires that it do so via notice-and-comment rulemaking under the APA.

The Act grants the Secretary authority to “prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate,

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<sup>9</sup> The proper remedy in this instance is to vacate the Directive. *See Daimler Trucks N. Am. LLC v. EPA*, 737 F.3d 95, 103 (D.C. Cir. 2013) (courts typically vacate agency action “when an agency entirely fails to provide notice and comment”) (internal quotations omitted).

and foreign commerce.” 49 U.S.C. § 5103(b)(1). The Secretary has delegated this rulemaking authority to the PHMSA, in coordination with FRA when pertaining to rail transport. *See* 49 C.F.R. § 1.97(b)(3). Pursuant to this authority, the PHMSA and FRA have promulgated regulations governing the transport of hazardous materials by rail, including the regulation cited as authority for the Directive, 49 C.F.R. § 180.509. *See* 49 C.F.R. part 180 (*citing* 49 U.S.C. §§ 5101-5128 for authority).

Importantly, however, the Act *requires* that when the Secretary exercises her authority to prescribe regulations governing hazardous materials transportation, she do so pursuant to the notice-and-comment procedures of the APA. *See* 49 U.S.C. § 5103(b)(2) (“A proceeding to prescribe the regulations must be conducted under section 553 of title 5, including an opportunity for informal oral presentation.”). Another provision of the Act permits the Secretary to issue “an order requiring compliance with [the Act] or a regulation” but the Secretary can *only* do so “after notice and an opportunity for a hearing,” except for emergency orders or certain inspection and investigation orders not invoked here. *See* 49 U.S.C. § 5121(a).

Because the Directive sets new requirements under the Act without notice and comment, FRA has acted without authority from any statute and thus violates the Act. *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1988) (“It is axiomatic that an administrative agency’s power to promulgate legislative

regulations is limited to the authority delegated by Congress.”); *Michigan v. EPA*, 268 F.3d 1075, 1081-82 (D.C. Cir. 2001) (“[I]f there is no statute conferring authority, a federal agency has none. . . . Agency authority may not be lightly presumed.”). As such, the Directive must be reversed to the extent it imposes new obligations.

The fact that § 180.509(b)(4) authorizes FRA action if appropriate grounds exist does not mean FRA may use that authority to issue a directive that contains a legislative rule, and thus avoid the statutory obligation to follow notice-and-comment procedures. An agency that is bound to follow the APA procedural requirements cannot issue a regulation that permits it to take actions in later proceedings irrespective of the APA requirements. “Such agency-generated exemptions would frustrate Congress’ underlying policy in enacting the APA by rendering compliance optional.” *United States v. Picciotto*, 875 F.2d 345, 347 (D.C. Cir. 1989) (rejecting argument that agency could “grant itself a valid exemption to the APA for all future regulations, and be free of APA’s troublesome rulemaking procedures forever after, simply by announcing its independence in a general rule,” noting that an agency “cannot construct its own veto of Congressional directions”). *See also Paralyzed Veterans of Am. v. D.C. Arena L.P.*, 117 F.3d 579 (D.C. Cir. 1997) (“It is certainly not open to an agency to promulgate mush and then give it concrete form only through subsequent less



formal ‘interpretations.’”), *overruled on other grounds by Perez v. Mortg. Bankers Ass’n*, 135 S. Ct. 1199 (2015).

## **II. The Directive Is Arbitrary, Capricious, and Inconsistent with Law**

Assuming *arguendo* that the Directive is not an invalid legislative rule, it is nonetheless subject to review as final agency action and must be set aside because it was issued in excess of FRA’s authority, is inconsistent with the law, and represents arbitrary and capricious decision-making. *See* 5 U.S.C. § 706(2).<sup>10</sup>

### **A. The Directive Is Arbitrary and Capricious Because the Record Does Not Support FRA’s Stated Justification for It**

The Directive is invalid under the APA’s well-established “arbitrary and capricious” test because FRA lacks the necessary record support to reach its

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<sup>10</sup> Courts review agency action based on the record before the agency at the time of the decision. *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 420 (1971), *abrogated on other grounds by Califano v. Sanders*, 430 U.S. 99 (1977). In this case, the “record” compiled by FRA was presented in a disorganized and unworkable manner and was missing several crucial documents that clearly were “before” the agency at the time of its decision, including some that FRA ignored in issuing the revised Directive. In this circumstance, the agency’s presumption of regularity as to the record is rebutted. *See, e.g., City of Dania Beach v. FAA*, 628 F.3d 581, 590 (D.C. Cir. 2010). The record that FRA certified is anything but reliable and clear, with many items omitted that undoubtedly should have been included. As of the date of the filing of this brief, the parties have not fully resolved several questions surrounding the compilation of this record that Petitioner raised upon receipt of the certified index. FRA provided ARI with some materials just two days before this brief was due, which may or may not resolve these issues. If some issues cannot be resolved prior to the filing of final briefs, ARI reserves the right to move to supplement the record with respect to certain documents that were before the agency and directly touch upon the matters in the Directive.

perfunctory conclusion that the class of tank cars identified may be in unsafe operating condition.

In determining whether the Directive is arbitrary and capricious, the Court is not to substitute its judgment for that of the agency, but nonetheless “must search for a reasoned explanation for agency action and where, as here, that reasoned explanation is not articulated by the agency in the orders under review and cannot be reasonably discerned by the court from the actions of the agency,” the petition must be granted. *ALLTEL Corp. v. FCC*, 838 F.2d 551, 556 (D.C. Cir. 1988). The Court’s review should be “searching and careful.” *Citizens to Preserve Overton Park*, 401 U.S. at 416. “[T]he agency must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Motor Vehicle Mfrs. Ass’n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co.* (“*State Farm*”), 463 U.S. 29, 43 (1983) (citation omitted); *Cnty. of Los Angeles v. Shalala*, 192 F.3d 1005, 1021 (D.C. Cir. 1999) (if an agency “failed to provide a reasoned explanation, or where the record belies the agency’s conclusion, [the court] must undo its action” (citation omitted)).

**1. FRA Did Not Have an “Objectively Reasonable and Articulable Belief” to Support Issuance of the Directive as to 14,800 Tank Cars**

Review of FRA’s action in this case is informed by the heightened evidentiary standard imposed on FRA by the regulation. To order an inspection or test outside the normal schedule, FRA must have “an *objectively reasonable and articulable belief* that a tank car or a class or design of tank cars may be in an unsafe operating condition.” 49 C.F.R. § 180.509(b)(4) (emphasis added). This term is defined in the regulation as “a belief based on *particularized and identifiable facts* that provide an *objective basis* to believe or suspect that a tank car or a class or design of tank cars may be in an unsafe operating condition.” 49 C.F.R. § 180.503 (emphasis added). This very specific evidentiary standard is more exacting than those under statutes allowing agencies to regulate in their discretion. *Cf. Troy Corp. v. Browner*, 120 F.3d 277, 280-81, 283 (D.C. Cir. 1997) (granting considerable deference to agency when relevant statute there allowed it to regulate “in [Secretary’s] judgment”). Here, FRA must have particularized facts that show an objectively reasonable belief that the class of 14,800 cars subject to the Directive – not just the one car that leaked – may be in an unsafe operating condition. Thus FRA acts arbitrarily and capriciously if the record does not contain particularized and identifiable facts that provide an objective basis for a reasonable belief that the cars in question may be operationally unsafe. *Cf. Sec.*

*Indus. & Fin. Markets Ass'n v. U.S. Commodity Futures Trading Comm'n*, 67 F. Supp. 3d 373, 430 (D.D.C. 2014) (finding agency's failure to consider and evaluate costs and benefits, as statute expressly required, to be arbitrary and capricious).

**(a) FRA Failed to Address the Uncontroverted Evidence Indicating that the Weld Conditions Found in the Cars Presented No Risk of Leaks**

FRA's basis for issuing the Directive relies upon assumptions that certain weld conditions found in 15% of sampled ARI-300 cars have the potential to result in a tank car leak, thus rendering them potentially operationally unsafe. FRA has no "particularized facts" to which it can point to make this connection and in fact the unrebutted and unaddressed data presented to the agency show that there is no connection. Accordingly, it cannot be said that FRA has articulated an objectively reasonable belief supporting the Directive.

Specifically, FRA points to the following in support of requiring special inspections and tests of 14,800 tank cars: (a) a single tank car within the class of ARI-300 tank cars slowly leaked one gallon of ethanol over two years ago; (b) that same tank car also had other weld "flaws" found on it; (c) 15% of the sampled cars of the same design had weld flaws that were "similar" to those found on the leaking car; and (d) these flaws violate a regulation. JA0004,JA0020-JA0021. What is missing are any facts or evidence that show a link between the existence of the so-called "similar" weld "flaws" that were found on these other cars and the

potential that those flaws might result in leaks, so as to provide a basis for objectively reasonable belief that the entire class may be operationally unsafe.

To the contrary, ARI's damage tolerance analysis concluded that even if a car had the type of flaws found in ARI's inspections, it *will not result in or create any threat of cracks or leaks forming* because the stress level will not drive crack growth, showing that there was no causal connection between such weld conditions and a risk of a crack or leak. JA1715-JA1718,JA1826. So, FRA had the following uncontroverted facts before it when it issued the Directive:

- no other car in the entire 14,800 car universe had been reported as having a leak;
- none of the over 700 cars inspected prior to the original Directive or the 200 additional cars inspected before issuance of the revised Directive had a crack or leak;
- 85% of the over 700 inspected cars had no flaws, and the flaws that were found were not critical;
- the weld at issue is a low stress joint even under the most severe conditions of in-train forces; and
- a weld condition of the type at issue in the Directive will not lead to a crack or leak.

JA0544,JA0556-JA0568,JA0570,JA1700-JA1701,JA1715-JA1718,JA1733-

JA1735,JA1826,JA1849-JA1850. Based on this evidence the study concluded that there is a 99.99% certainty that *no* cars have cracks or leaks and weld flaws of the type found on the sample of cars subject to the Directive *will not result in cracks or leaks*. JA1715,JA1717,JA1826.

ARI presented FRA with this data on several occasions preceding the issuance of the Directive, including preliminary results in May 2016. JA1546-JA1547,JA1709-JA1710. The Directive does not address any of the data.

An agency may not “close its eyes to on-point and uncontradicted record evidence without any explanation at all.” *Fogo de Chao (Holdings) Inc. v. Dep’t of Homeland Sec.*, 769 F.3d 1127, 1147 (D.C. Cir. 2014). *See also Butte Cnty. v. Hogen*, 613 F.3d 190, 194 (D.C. Cir. 2010) (“[A]n agency’s refusal to consider evidence bearing on the issue before it constitutes arbitrary agency action within the meaning of § 706.”); *SecurityPoint Holdings, Inc. v. Transp. Sec. Admin.*, 769 F.3d 1184, 1188 (D.C. Cir. 2014).

The Directive provides no facts, “particularized” or otherwise, that substantiate the leap in logic connecting the existence of a nonconforming weld condition in a non-critical area of the tank cars subject to the Directive to the possibility of a leak or unsafe operating condition. *ALLTEL*, 838 F.2d at 560-61 (rejecting agency argument that “relies on [a] chain of assumptions” when agency

had not produced any record explaining that a problem existed or was as would be remedied in the agency's order, noting that "deference is not a blank check"); *State Farm*, 463 U.S. at 43 ("[A]n agency rule would be arbitrary and capricious if the agency . . . offered an explanation for its decision that runs counter to the evidence before the agency . . . ."). "The agency's statement must be one of 'reasoning'; it must not be just a 'conclusion'; it must 'articulate a satisfactory explanation' for its action." *Butte Cnty.*, 613 F.3d at 194 (quoting *Tourus Records, Inc. v. DEA*, 259 F.3d 731, 737 (D.C. Cir. 2001)). Nor does FRA even try to rebut the evidence that shows its conclusions are factually incorrect and logically unsound.

FRA knows that *de minimis* weld flaws routinely exist somewhere on every type of tank car, especially in noncritical weld areas that are not subject to enhanced inspection techniques such as the sump and bottom outlet valve welds at issue here. *See* 60 Fed. Reg. 49,048, 49,059 (Sept. 21, 1995) ("Damage-tolerance assumes that flaws exist in the structure . . . ."); JA0051. FRA has previously acknowledged that not all weld flaws tend to grow over time and many have no effect on strength. *See* 57 Fed. Reg. 22,014, 22,016 (May 26, 1992) (explaining that some imperfections, "including weld inclusions (slag), porosity, and incomplete weld fusion . . . have no effect on strength nor have they shown a propensity to cause crack growth"). Concluding that an entire class of tank cars may be operationally unsafe based on such minor conditions lacks any record

explanation, and constitutes arbitrary and capricious decision-making. *See Home Box Office, Inc. v. FCC*, 567 F.2d 9, 36 (D.C. Cir. 1977) (“[A] regulation perfectly reasonable and appropriate in the face of a given problem may be highly capricious if that problem does not exist.” (internal quotation and citation omitted)).

Further, if FRA is asserting that it is objectively reasonable to conclude that any weld flaw, no matter how small or inconsequential, by itself makes a tank car potentially operationally unsafe, then there is no reasoned basis to only apply the Directive to tank cars manufactured by ARI and ACF, when all tank cars in the industry have weld flaws. *See* JA0043-JA0052 (identifying acceptance criteria permitting weld flaws of certain sizes). *Cf. Lilliputian Sys., Inc. v. Pipeline & Hazardous Materials Safety Admin.*, 741 F.3d 1309, 1313 (D.C. Cir. 2014) (“[A]n agency cannot treat similarly situated entities differently unless it ‘support[s] th[e] disparate treatment with a reasoned explanation and substantial evidence in the record.’” (internal citation omitted)). Nor can FRA justify this inconsistency by pointing to the fact that one ARI-manufactured car leaked, because the Directive also covers ACF-manufactured cars, and there is no evidence any ACF-manufactured car leaked or showed cause for concern, particularly because ACF uses different welders. JA1733.

In sum, the record does not contain any “*particularized* and *identifiable* facts” that provide an “*objectively reasonable*” basis to conclude that the entire



class of tank cars may be in an unsafe operating condition so as to require the extraordinarily broad and unprecedented new requirements contained in the Directive.

**(b) FRA's Changing Justifications Between Directives  
Illustrates the Lack of an Objectively Reasonable  
Basis for the Directive**

FRA's justification for the Directive changed between when it was originally issued and when it was revised and superseded. The original Directive contained "findings" that poor welding practices led to flaws in the welds in CTCX-736177, which led to cracks, and that a crack resulted in the leak. It then noted that 15% of 386 cars examined revealed "similar" flaws, which might in turn lead to cracks (which in turn might lead to leaks). JA0003-JA0004. These conclusions were not supported by the reports regarding the CTCX-736177, which concluded that the leak was caused by a lack of fusion, not a crack. JA0557,JA0566,JA0570,JA1733-JA1735. Nevertheless, FRA claimed that weld flaws in these cars lead to cracks, which lead to leaks.

ARI provided FRA with the findings from its damage tolerance analysis of the weld flaws (*see* p.10-11, *supra*). The evidence showed that flaws in these welds would not lead to leaks from stress-induced fatigue cracks during train operation, even flaws "modeled" as cracks. JA1715-JA1718,JA1826. This

disproved FRA's theory that weld flaws in other cars could lead to cracks and ultimately a leak.

When the revised Directive was issued, the only references to a crack included the generic statement that higher mileage cars "are more likely to have developed cracks or leaks" and that the required testing is necessary to locate "slag inclusions and related cracks." JA0016,JA0022. The data that ARI presented to FRA affirmatively disproved the premise that cracks were "related" to the slag inclusions found, that cracks had anything to do with the leak, or that cracks would be propagated from the slag inclusions or weld conditions. JA1715-JA1718,JA1826. In an apparent attempt to account for this data, FRA justified the revised Directive based on the facts that CTCX-736177 leaked, CTCX-736177 also had weld flaws, 15% of the nearly 400 CIT sampled cars had weld flaws, and the flaws made the cars noncompliant with regulations.<sup>11</sup>

This apparent abandonment of the one unsupported rationale (flaws shown on sampled cars will lead to cracks, which will lead to leaks as happened on CTCX-736177) in favor of a conclusory and disproven statement (flaws on sampled cars could lead to leaks because flaws also existed on CTCX-736177 and flaws constitute violations) illuminates the gap in FRA's thinking, glossing over

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<sup>11</sup> Of note, the revised Directive only relies on the nearly 400 cars inspected by CIT and does not there reference the additional 321 cars inspected by ARI.

the lack of support connecting the existence of flaws to risk of leaks. It illustrates FRA has no objectively reasonable basis to support the tests imposed on an entire class of cars. This type of casting about for justification is not permitted under the APA's arbitrary and capricious standard. *Cf. Kristin Brooks Hope Ctr. v. FCC*, 626 F.3d 586, 589-91 (D.C. Cir. 2010) (finding agency action arbitrary and capricious based on its "failure to provide a reasonable explanation that connects the 'facts found' and the 'choice made,'" noting that "[f]ear may have supplanted reason").

## **2. The Directive Fails to Explain How the Regulations Were Violated**

FRA's lack of reasoned decision-making in issuing the Directive is further demonstrated by its assertion that defects found on some of the sampled cars make them "noncompliant with Federal regulations," and that justifies concluding that the entire class of AR-300 cars might be in unsafe operating condition. JA0021. The Directive nowhere explains how the cars are "noncompliant." Not all weld flaws violate the regulations, particularly non-critical flaws found on in-service cars in non-critical areas.<sup>12</sup> Further, not all violations of the regulations

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<sup>12</sup> The Directive requires that owners must use Tank Car Manual Appendix W for the "acceptance criteria," *i.e.*, whether a defect found must be repaired. Because Appendix W only applies to new welds, the Directive's requirement to use it as acceptance criteria for these new in-service inspections and tests is inappropriate. Further, it is inconsistent with FRA's own longstanding position that there are structural defects that may not meet the Appendix W standards yet

automatically result in potentially unsafe conditions so as to justify the Directive. FRA assumes both yet has no support in the record for either.

Finally, the lack of justification for this Directive stands in stark contrast to the few past published directives that research has shown have been issued by FRA. *See* 64 Fed. Reg. 18473 (Apr. 14, 1999) (directive prompted by incident where a tank car loaded with propane “split in two around the circumference” and one end “rocketed down the tracks for several hundred feet spewing flames and smoke as fire consumed the entire contents of the car”); 80 Fed. Reg. 14027 (Mar. 18, 2015) (directive prompted by 16 separate tank cars that leaked crude oil, another car that leaked mineral spirits, and clear inconsistencies between the tank cars and their approved design).

**B. The Directive Is Inconsistent with Law Because the Authorizing Regulation Does Not Permit FRA to Impose New and Unprecedented Tests Not Already Required by Current Regulations**

An agency action must be vacated if it is not in accordance with law, including with properly issued agency regulations governing the decision. Although courts give some deference to an agency’s interpretation of its own regulations, that deference is not unbounded and a court will reject interpretations that are “plainly erroneous or inconsistent with the regulation.” *Auer v. Robbins*,

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are not indicative of structural defects that will grow over time. *See* 57 Fed. Reg. at 22,016. *See Cnty. of Los Angeles*, 192 F.3d 1005, 1022 (agency acts arbitrarily when departing from previous treatment of similar situations).

519 U.S. 452, 461 (1997) (quoting *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410 (1945)). An agency cannot act contrary to the plain meaning of the regulation. See *Christensen v. Harris Cty.*, 529 U.S. 576, 588 (2000). Cf. *Nat’l Med. Enters. v. Bowen*, 851 F.2d 291, 293 (9th Cir. 1988) (“[A]n agency’s interpretation of a statute in a manner inconsistent with a regulation will not be enforced.”).

The Directive exceeds the authority granted under the relevant regulation, which provides that, without regard to the normal schedule, a tank car owner must ensure “an appropriate inspection and test according to the type of defect and the type of maintenance or repair performed if . . . [FRA] requires it based on the existence of an objectively reasonable and articulable belief that a tank car or a class or design of tank cars may be in an unsafe operating condition.” 49 C.F.R. § 180.509(b)(4). The “it” that FRA may require is an “inspection and test” outside the normal interval. But, the plain text and history of the regulations demonstrate that what constitutes “appropriate inspections and tests” are those developed by the owner as specified in the regulations. In other words, § 180.509(b)(4) can be used to require an “inspection and test” sooner than would otherwise be necessary, but it does not permit FRA unbridled ability to unilaterally impose new test requirements not contained in existing regulations. It is the owner who “must ensure an appropriate inspection and test according to the type of defect . . . .” 49 C.F.R. § 180.509(b).

This is apparent from a plain reading of the regulations. First, “inspection and test” is a defined term meaning “a careful and critical examination of a tank car and its appurtenances performed by qualified personnel *following the owner’s qualified procedures.*” 49 C.F.R. § 180.503 (emphasis added). Second, the provision itself is titled “conditions requiring *qualification* of tank cars,” 49 C.F.R. § 180.509(b) (emphasis added). Qualification is defined to mean that the car “conforms to the specification to which it was designed, manufactured, or modified to the requirements of this subpart, to the applicable requirements of the [Tank Car Manual], and to the *owner’s acceptance criteria.*” 49 C.F.R. § 180.503 (emphasis added). The definition further states that “Qualification is accomplished by careful and critical examination that verifies conformance using inspections and tests based on a *written program approved by the tank car owner* followed by a written representation of that conformance.” *Id.* (emphasis added). *See also* 77 Fed. Reg. at 37,974 (explaining that “FRA considers inspection and testing (*e.g.*, careful and critical examination) to be an integral part of the definition of qualification”).

Under the hazardous materials regulatory scheme, the regulations establish “the minimum acceptable framework for an owner’s qualification program,” but a tank car owner is to develop a qualification program that “must identify where to inspect, how to inspect, and the acceptance criteria.” 49 C.F.R. § 180.501(b). Further, a tank car facility develops a quality assurance program, approved by

AAR, that contains “[p]rocedures for evaluating the inspection and test technique employed, including . . . the sensitivity and reliability of the inspection and test technique and minimum detectable crack length.” 49 C.F.R. § 179.7(b)(10). Thus, the regulation “outlines where and what to inspect, but not how to inspect” – those details are to be developed by the tank car owner as part of a qualification program. *See* 60 Fed. Reg. at 49,063 (explaining that “[t]his approach allows each tank car owner the flexibility to develop inspection and test procedures appropriate for each unique tank car, or a series of unique tank cars based on operating and maintenance experience”); 61 Fed. Reg. 33,250, 33,252 (June 26, 1996) (same).

The Directive completely disregards the plain language in the regulatory definitions and the fundamental premise in the regulations for deciding what constitutes an appropriate “inspection and test” program. Though the regulation permits FRA to require that owners qualify a car sooner than would otherwise be required, FRA may not disregard the regulatory provision that the qualification program is determined by the owner, without undertaking a rulemaking in accordance with the APA and the Act.

**C. The Directive Is Arbitrary and Capricious Because the New Substantive Requirements Imposed by the Directive are Not Supported by the Record**

The specific requirements imposed by the Directive represent a catalogue of decisions that are not grounded in the record, logic, or reasoned connection

between the weld flaws the that the agency decided must be found and those that might actually present a potential for a leak or failure of the car.

**1. The New 90% POD Requirement Imposed by the Directive Is Not Supported by the Record, and Is Not Feasible**

Prior to this Directive, there has *never* been a numerical POD requirement imposed on the tank car industry for NDT testing under the regulations. FRA admits this. JA1126. (“There are no Federal POD . . . requirements . . . .”) Although the POD concept has been a part of industry discussions and tests for years, the regulations require the car owner to develop and provide to a tank car facility written instructions for the inspection and test and the acceptance criteria based on what the tank car owner determines is a “critical” (*i.e.*, potentially problematic) crack length. 49 C.F.R. §§ 180.503, 180.509.

FRA’s basis for selecting a 90% POD is unsupported by the record. FRA cites two sources, neither of which imposes a specific POD with set flaw sizes the way FRA does here. First, FRA cites a Department of Defense handbook for the definition of POD, but that document does not apply to tank cars and expressly states it is “for guidance only” and “cannot be cited as a requirement.” JA0950,JA0961. Nor does this publication set a specific numerical POD for the tank car industry to follow. JA0950,JA0961. Second, FRA relies on the ASME Boiler and Pressure Vessel Code Section V, which is not applicable to tank cars and has not been incorporated by reference into any part of the regulations related



to tank cars (except one reference to cryogenic liquid tank cars that are not at issue here). *See* 49 C.F.R. § 171.7(g)(1)(iii). JA0880,JA0881. There is no explanation for how this Code relates to the applicability or feasibility of a 90% POD requirement for in-service testing of tank car welds.

By contrast, current regulations do not even require NDT testing (which could include a POD requirement if the tank car owner so directed) such as ultrasonic for certain weld areas that have been determined as *non-critical*, such as the sump area in dispute here. JA0041-JA0042. Thus, a POD is not even relevant for such non-critical welds.

Moreover, the manner in which the POD requirement was determined indicates a lack of reasoned decision-making. Even assuming the Directive was lawful in every other manner, the Directive does not provide a specific methodology describing how to quantify the POD, including the false call rate (*i.e.*, how many false positives will be accepted in order for the POD to be valid) or the required confidence level (*i.e.*, how often the 90% POD can be duplicated). JA0018-JA0019,JA0023,JA0112-JA0118. Requiring a POD without these factors undercuts its effectiveness and makes it arbitrary and capricious, as there could be

tremendous variability among how different tank car owners implement the requirement.<sup>13</sup>

The regulations expressly require tank car owners to choose an inspection method capable of detecting a specified crack before it propagates to a critical length (*i.e.*, a size that will cause the tank car to fail prior to the next scheduled inspection and test). 49 C.F.R. § 180.511(b). Accordingly, it is up to the tank car owner (not FRA) to make the critical flaw size determination. Moreover, there is *nothing* in the record supporting how or why FRA chose those sizes. The chosen sizes are significantly smaller – 1/100th the length and 1/18th the width – than the defect that caused the single tank car to leak. JA0018,JA0023,JA0556-JA0568. Further, the crack width specified in the Directive is not representative of actual flaws typically found in welds and is thus of limited utility. JA0113-JA0129,JA1608-JA1609,JA1676-JA1687. *Cf. Nw. Coal. for Alternatives to Pesticides v. EPA*, 544 F.3d 1043, 1052 (9th Cir. 2008) (standard was arbitrary when EPA failed to explain how it corresponded at all to the data or problem to be addressed, noting “it is entirely unclear why the EPA chose safety factors of 3x . . . as opposed to 4x or 5x or 8x or 9x” and “it appears that the EPA chose these

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<sup>13</sup> In addition, the original Directive set a 90% POD without even specifying a flaw size (*i.e.*, without indicating what size or type of flaws should be detected 90% of the time). FRA’s inclusion of size criteria in the revised Directive – criteria that are not based on real world conditions – further demonstrates that it had to reach for anything to justify the revised Directive in light of ARI’s concerns.

lower safety levels arbitrarily – to acknowledge certain concerns about each pesticide, but with no specific evidence that these lower safety factors would actually account for the risks”); *Leather Indus. of Am., Inc. v. EPA*, 40 F.3d 392, 403 (D.C. Cir. 1994) (remanding agency action where agency offered no reason for selecting figures and ignored relevant information without explanation).

FRA has no basis to conclude that the 90% POD requirement is feasible for the industry. The Directive sets a 90% POD requirement at the flaw sizes indicated in the face of several consecutive *FRA-sponsored and published* studies about POD rates, all of which clearly show that 90% POD is extremely difficult to achieve and none of which has shown a 90% POD rate for anything close to the flaw sizes specified in the Directive. All were before the agency at the time of the Directive, some were cited by FRA to ARI in discussions preceding the Directive, and some were also cited by ARI to FRA in letters regarding the Directive. JA0053,JA1155,JA1156,JA1269,JA1270,JA1370,JA1594,JA1731. ***None*** of these studies showed that the industry could meet a 90% POD for flaws at the size imposed by the Directive (3/16 inches in length); and in many cases that standard could not be reached at all or only for cracks (not other types of non-critical weld conditions) that were much larger, often exceeding an inch or more. JA0125-JA0126,JA1180-JA1181,JA1288,JA1676-JA1687. Specifically, the studies showed the following valid data:

- January 2002: 90% POD only reached for some tests and at combined crack lengths of 2.9 inches or more. JA0167-JA0171.
- May 2009: 90% POD only reached for some tests and at combined crack lengths of 2.75 inches or more. JA1289-JA1291. This study was presented to ARI by FRA in January 2016. JA1269.
- December 2013: 90% POD not attainable for visual testing or liquid dye testing, reachable for some operators on other NDT only at 1.13 inches or more in crack length. JA1227-JA1234,JA1247.
- August 2016 (one month before the Directive): 90% POD not attainable for visual testing or magnetic testing, reachable for other NDT only at crack lengths exceeding 1.75 inches. JA1676-JA1687.

In the most recent study (published only one month before the Directive), when cracks of a length of 1/2 inches were inspected, none of the industry's technicians who participated could achieve a 90% POD. JA1676-JA1687. In response to all of this evidence in the record, and without citing any supporting data, the Directive simply concludes that "FRA believes utilizing a 90% POD is both feasible and necessary given the defects involved." JA0018. This is impermissible under the APA. *See State Farm*, 463 U.S. at 52 ("The agency must explain the evidence which is available, and must offer a 'rational connection

between the facts found and the choice made.’” (citation omitted)); *SecurityPoint*, 769 F.3d at 1188.

Although ARI could reach a 90% POD in its voluntary sample program, that was only for one flaw length, was based on laboratory conditions (rather than real experimental sample testing as required by POD methodology), and (for visual testing) involved the much larger weld flaws specified in the Directive rather than those that would be found in actual service. JA1560-JA1562,JA1565,JA1570. The fact that ARI could meet this standard as part of a voluntary sample program under conditions that are not representative of “real-world” testing does not support the conclusion that the industry can meet the standard in the Directive, which is more stringent. That the FRA-sponsored studies repeatedly could not reliably detect significantly larger flaws demonstrates the lack of foundation for FRA’s conclusion. JA0125-JA0126,JA1180-JA1181,JA1288,JA1676-JA1687.

Finally, there is nothing in the Directive or the record indicating why a 90% POD requirement is needed, *i.e.*, why tests otherwise selected by the owner under the properly issued regulations would not provide adequate testing for these tank cars.

## **2. The Directive Does Not Provide Any Support for Onerous New Recordkeeping and Reporting Requirements**

The Directive does not explain why the new recordkeeping and reporting requirements – taking video or photographs of ultrasonic tests and keeping records

for ten years – are necessary. For example, current regulations already provide that if a car is leaking, it cannot be shipped and FRA must be provided with clear and extensive documentation. 49 C.F.R. § 180.517. FRA provides no justification for why the Directive is now requiring *more* recordkeeping when leaks are *not* found. Also, despite valid concerns raised by those responsible for conducting these tests and making the records that equipment does not exist that would make digital recordings of ultrasonic scans, the Directive provides a conclusory response insisting that it can be done without citing anything to support that conclusion.

### **CONCLUSION**

For the reasons expressed above, the Directive is unlawful and ARI respectfully requests that the Court issue an order vacating it.

Respectfully submitted,

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This brief complies with the type-volume limitations of Fed. R. App. P. 32(a)(7)(B) because this brief contains 12,942 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f).

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## **CERTIFICATE OF SERVICE**

I herby certify that on the 15th day of May 2017, a copy of the Brief of Petitioners was filed electronically using the CM/ECF system, which will provide service on the parties.

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